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Decision 20-04-013 April 16, 2020

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California
Edison Company (U338E) for
Approval of Its Grid Safety and
Resiliency Program.

Application 18-09-002

DECISION ADOPTING SETTLEMENT

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Appendix 1 – Settlement Agreement Resolving All Issues for Southern California Edison Company's (U 338-E) Grid Safety and Resiliency Program Application

DECISION ADOPTING SETTLEMENT

Summary

This decision adopts and approves the Settlement Agreement, dated July 31, 2019, between the Public Advocates Office of the Public Utilities Commission, Coalition of California Utility Employees, Small Business Utility Advocates, The Utility Reform Network, and Southern California Edison Company. This decision finds that the Settlement Agreement between the parties is reasonable in light of the whole record in this proceeding, is consistent with the law, and is in the public interest.

This decision approves \$407,291,000 in capital expenditures for Southern California Edison Company's Grid Safety and Resiliency Program. Of that amount \$284,842,000 is for the Wildfire Covered Conductor Program which is the first large-scale deployment of covered conductor in California to harden the distribution system against extreme weather events and designed to reduce wildfire ignition events. The decision also approves \$26,864,000 to install new remote-control automatic reclosers, and \$66,235,000 to install additional fuses that activate quickly to reduce the energy transmitted due to faults. The remaining capital expenditures approved in this decision allow Southern California Edison Company to install new high definition cameras, additional weather stations, advanced modeling computer hardware, and conduct asset reliability and risk analysis.

This decision approves \$119,164,000 in operations and maintenance expenditures for Southern California Edison Company's Grid Safety and Resiliency Program. Of that amount \$73,519,000 is for additional vegetation management that will proactively assess, and, as needed, mitigate trees that pose a blow-in / fall-in threat to electrical facilities but are located outside existing

required clearances and are not already dead, sick, or dying. The decision also authorizes Southern California Edison Company to conduct infrared inspections of the distribution system in high fire risk areas to reduce potential wire and equipment failure that could lead to ignitions, as well as to conduct additional customer outreach and operational measures associated with “last resort” de-energizing power lines during extreme fire conditions, and other activities related to the Grid Safety and Resiliency Program.

Adoption of this Settlement Agreement resolves all issues presented in Application 18-09-002. Accordingly, Application 18-09-002 is closed.

1. Background

On September 10, 2018, Southern California Edison Company (Southern California Edison) filed an application seeking Commission approval to record and recover the reasonable costs of its Grid Safety and Resiliency Program. The Grid Safety and Resiliency Program is designed to implement measures addressing emerging state policy directed at reducing wildfire risk. The increasing magnitude of the wildfire risk became clear in the series of devastating fires in the latter half of 2017.

Southern California Edison had previously implemented a number of measures to address wildfire risk across its service area, however, it agrees with the Governor, legislators, and other state officials that even greater efforts are now required to adapt to a longer and hotter potentially catastrophic wildfire season. To that end Southern California Edison’s Grid Safety and Resiliency Program application proposes broader, more advanced measures than those described in its 2018 General Rate Case (Application (A.) 16-09-001) (2018 GRC), implementation of which should not be delayed until its next general rate case application (A.19-08-013). Southern California Edison proposes “a

comprehensive program ... expected to last through at least 2025, incorporating leading practices and mitigation measures selected based on their effectiveness and with appropriate consideration of potential costs.”¹ Southern California Edison states the Grid Safety and Resiliency Program will enhance the safety of its electrical system and make it more resilient during wildfires, as well as provide ancillary benefits to improve fire agencies’ ability to detect and respond to emerging fires.

As the additional measures involve costs above amounts currently authorized in rates or requested in the 2018 GRC, Southern California Edison is requesting the Commission authorize 2018-2020 Grid Safety and Resiliency Program costs incremental to those requested in the 2018 GRC and approve an interim Grid Safety and Resiliency Program Memorandum Account and a two-way Grid Safety and Resiliency Program Balancing Account.² Southern California Edison notes that Grid Safety and Resiliency Program costs beginning in 2021 through 2023 will be addressed in A.19-08-013 and any costs beyond 2023 will be addressed in future General Rate Cases.

The application requests the Commission authorize a Grid Safety and Resiliency Program capital and operations and maintenance (O&M) forecast of \$582 million. The associated revenue requirement is \$229 million.³ The proposed \$582 million forecast is approximately four percent of what Southern California Edison sought in its 2018 general rate case. Southern California Edison

¹ Application at 2.

² On January 10, 2019, the Commission adopted D.19-01-019 approving the creation of the Grid Safety and Resiliency Program Memorandum Account with an effective date of SCE’s filing, September 10, 2018.

³ Application at 9, Table III-2.

asserts that the grid safety and resiliency program incorporates practices and mitigation measures selected based on effectiveness and potential costs.

Southern California Edison claims that the measures will help enhance the safety of the electrical system and make it more resilient during wildfires. This application also includes additional resources that will increase the ability to detect and respond to emerging fires in coordination with utility emergency management personnel.

Southern California Edison states that the grid safety and resiliency program will help address California's increasing fire risk by further hardening the electric system and enhancing utility situational awareness and operational capabilities. Southern California Edison presents three broad categorizations of activities: grid hardening; situational awareness; and operational practices. Southern California Edison states that these activities will require incremental expenditures beyond capital expenditures and operational expenses currently reflected in its revenue requirement. Southern California Edison presented a three-year forecast from 2018 to 2020 of incremental costs, capital expenditures of \$407 million, operation and maintenance expenses of \$175 million and a revenue requirement of \$229 million. Southern California Edison does not present a forecast beyond 2020 though the higher cost activities, such as the covered conductor and vegetation management programs are expected to continue beyond 2025.

Protests to the applications were received from the City of Laguna Beach, the Office of the Safety Advocate, the Public Advocates Office of the Public Utilities Commission, the Small Business Utility Advocates, and The Utility

Reform Network, known as TURN.⁴ The Coalition of California Utility Employees also submitted a response to the application. Southern California Edison submitted a reply to the protests and response on October 22, 2018.

In addition, after this application was filed, Senate Bill 901 was signed into law by the Governor and the Commission issued an Order Instituting Rulemaking 18-10-007 to implement the provisions of Senate Bill 901 related to electric utility wildfire mitigation plans.

Notice of the application appeared on the Commission's Daily Calendar on September 12, 2018. On September 27, 2018, in Resolution ALJ 176-3424, the Commission preliminarily categorized this proceeding as ratemaking and determined hearings were necessary. A prehearing conference was held on November 15, 2018, to discuss the issues of law and fact and determine the need for hearing and schedule for resolving the matter. A Scoping Memo was issued on May 9, 2019, setting forth the scope and schedule for the proceeding and setting evidentiary hearings on July 1-3, 2019 and July 8-10, 2019. Prepared testimony was served according to the schedule set forth in the Scoping Memo and Motions pursuant to Rule 13.8 of the Commission's Rules of Practice and Procedure (Rules)⁵ to offer in evidence their respective prepared testimony were made by the Office of the Safety Advocate, the Public Advocates Office of the

⁴ In its prehearing conference statement of November 13, 2018, the City of Laguna Beach requested that it be removed as a party to this proceeding. That request was granted by the assigned Administrative Law Judge at the Prehearing Conference on November 15, 2018 and as of that date the City of Laguna Beach was no longer a party to this proceeding. RT at 9.

⁵ California Code of Regulations, Title 20, Division 1, Chapter 1. Subsequent references to "Rule" are to the Commission's Rules of Practice and Procedure.

Public Utilities Commission, The Utility Reform Network, and Southern California Edison.⁶

On January 10, 2019, the Commission authorized Southern California Edison Company to establish the Grid Safety and Resiliency Program Memorandum Account effective September 10, 2018 as requested in a Motion filed on September 10, 2018 and in A.18-09-002 (Interim Memorandum Account Decision). The Interim Memorandum Account Decision established reporting requirements to monitor the costs booked to the Grid Safety and Resiliency Program Memorandum Account over the course of this proceeding. The Interim Memorandum Account Decision did not allow Southern California Edison to recover costs recorded in the Grid Safety and Resiliency Program Memorandum Account, as whether, how, and to what extent Southern California Edison may recover the costs tracked in the Grid Safety and Resiliency Program Memorandum Account will be determined as part of this decision.

Two Public Participation Hearings were held to receive public input on the Southern California Edison's proposals. The first in Rialto, California was held on May 15, 2019. The second in Oxnard, California was held on May 16, 2019. Seventeen members of the public addressed the Commission at those Public Participation Hearings and while none directly opposed the application, many expressed concerns that the proposals were not the most cost-effective long-term

⁶ Motion of Southern California Edison to Offer Prepared Testimony into Evidence, July 31, 2019; Motion of TURN to Enter Testimony into the Evidentiary Record, August 1, 2019; Motion of the Public Advocates Office to Offer Testimony into Evidence, August 2, 2019; Motion of the Office of the Safety Advocate to Offer Testimony into Evidence, August 30, 2019. The Small Business Utility Advocates served direct and rebuttal testimony on April 23, 2019, and May 31, 2019, but no motion to move its testimony into the record of this proceeding has been submitted. The Coalition of California Utility Employees did not serve testimony in this proceeding and accordingly they did not file a related motion.

solution to reduce wildfire risks. Those members sought additional measures such as actions to reduce carbon emissions, additional undergrounding of electric lines, and increased micro-grids.

On June 28, 2019, TURN submitted an unopposed request to remove the first week of hearings from the calendar so that the parties could focus on ongoing settlement discussions that if successful would eliminate the need for hearings in this proceeding. On July 3, 2019, Southern California Edison notified the assigned Administrative Law Judge, with electronic copy to the service list that the Public Advocates Office of the Public Utilities Commission, Coalition of California Utility Employees, Small Business Utility Advocates, The Utility Reform Network, and Southern California Edison (“settling parties”) had agreed in principle to settle all issues in this proceeding, and that the Office of the Safety Advocate did not need to cross-examine any witnesses and that the remaining hearing days could be removed from the calendar. A joint motion for Approval of Settlement Agreement was submitted on July 31, 2019, by the settling parties.

The Office of the Safety Advocate submitted comments opposing the settlement on August 30, 2019. Southern California Edison submitted a reply to the Office of the Safety Advocate’s comments on September 16, 2019. On January 1, 2020, the statutory authorization creating the Office of the Safety Advocate ended,⁷ which by law removes the Office of the Safety Advocate as a party to this proceeding. Accordingly, the Settlement Agreement is now an all-party settlement.

⁷ Senate Bill 62 (Chapter 806, Statutes of 2016), codified at Public Utilities Code § 309.8. (§ 309.8(d) stated: “[t]his section shall remain in effect only until January 1, 2020, and as of that date is repealed....”)

After reviewing the proposed settlement and evidence moved into evidence, the assigned Administrative Law Judge determined that in at least one place the proposed Settlement Agreement referenced Workpapers of Southern California Edison,⁸ however, those Workpapers were not among the documents referenced in the Motions to offer in evidence the respective prepared testimony of the parties. Accordingly, a ruling was issued on March 9, 2020, instructing parties to review the references made in the Settlement Agreement and in the proffered testimony to ensure all relevant information has been included in their respective motions made pursuant to Rule 13.8. Parties were instructed to provide a supplemental motion to offer in evidence any and all relevant written testimony needed to fully consider the proposed Settlement Agreement no later than March 16, 2020. Southern California Edison submitted a Motion to Offer Prepared Testimony into Evidence on March 11, 2020 that included the Workpapers referenced in the Settlement Agreement.

1.1. Factual Background

Southern California Edison states it developed its Grid Safety and Resiliency Program to be a comprehensive program that brings together a number of practices and mitigation measures selected based on their effectiveness in wildfire-prone environments and with appropriate consideration of projected cost. The Grid Safety and Resiliency Program seeks to bolster fire prevention (*i.e.*, reduce potential ignitions) and suppression (*i.e.*, more rapid identification and assessment of wildfires) activities, and enhance system resiliency. To accomplish these objectives the Grid Safety and Resiliency Program includes additional mitigation measures focused on (1) further grid

⁸ Settlement Agreement at page 9, footnote 8.

hardening; (2) enhanced situational awareness; and (3) enhanced operational practices.

Southern California Edison proposes to further harden its infrastructure to reduce potential fire ignition sources. Southern California Edison claims that over half of all fires associated with Southern California Edison's distribution infrastructure in high fire risk areas were caused by foreign objects (*e.g.*, branches, palm fronds, metallic balloons, etc.) contacting electric facilities. To reduce fire ignitions caused in this manner, Southern California Edison proposes to replace standard overhead conductor with "covered" conductor that is wrapped with special layers of insulation materials that protect electric lines against contacts from foreign objects.

Additionally, Southern California Edison will also install additional fire resistant, composite poles, additional fuses that activate quickly to reduce the energy transmitted due to faults, and automatic reclosers and circuit breakers with high-speed, "fast curve" settings to enable recloser relay blocking during red flag warnings in order to reduce the frequency and duration of some public safety power shutoff events.

Southern California Edison proposes to enhance existing situational awareness capabilities to more fully assess potential wildfire conditions and develop appropriate operational plans to mitigate wildfire risk. As part of the Grid Safety and Resiliency Program Southern California Edison proposes to deploy additional weather stations along circuits in high fire risk areas and install high definition cameras to enable Southern California Edison and state and local fire agencies to more quickly respond to wildfires. Southern California Edison is also obtaining advanced computer hardware and "state-of-the-art" software to run a High Resolution Weather model that will support planning and

operational decisions to reduce wildfire risk as well as increasing staffing of fire management personnel and meteorologists.

For the third part of the Grid Safety and Resiliency Program, Southern California Edison proposes to enhance operational practices regarding fire prevention and system resiliency. Specifically, Southern California Edison proposes enhanced vegetation management that focuses on proactively assessing and, as needed, mitigating trees that pose a blow-in/fall-in threat to electrical facilities but are located outside existing required clearances and are not already dead, sick, or dying. Additionally, Southern California Edison proposes regular infrared inspections of the distribution system in high fire risk areas to reduce potential wire and equipment failure that could lead to ignitions, and additional customer outreach and operational measures associated with “last resort” de-energizing power lines during extreme fire conditions.

Southern California Edison proposed a two-way balancing account and requested a reasonableness threshold to be set at 115 percent of the total Grid Safety and Resiliency Program capital and O&M forecast of \$582 million, or \$670 million. Southern California Edison proposed that amounts recorded up to that \$670 million figure be deemed reasonable and any amount of the total spend recorded in excess of these amounts will be subject to a traditional reasonableness review in a future application. As part of this reasonableness threshold Southern California Edison proposed no further reasonableness review be required if: (1) Southern California Edison Grid Safety and Resiliency Program spending is less than or equal to the reasonableness threshold; and (2) Southern California Edison manages the cost per circuit mile for the covered conductor program up to 115 percent of the estimated amount of \$428/mile in 2018.

The Public Advocates Office of the Public Utilities Commission supported Southern California Edison's grid hardening proposals, but expressed concerns regarding the lack of demonstrated evidence the proposed actions would have in reducing wildfire risks. The Public Advocates Office of the Public Utilities Commission also recommended approving the installation of 330 circuit miles of covered conductor instead of the 592 circuit miles proposed by Southern California Edison given the timeframes proposed and the capacity of Southern California Edison to safely and effectively ramp up the installation process. The Public Advocates Office of the Public Utilities Commission recommended that if Southern California Edison could safely and effectively exceed 330 circuit miles of installation, the Commission should authorize Southern California Edison to record the costs in its Grid Safety and Resiliency Program Memorandum Account. In addition, the Public Advocates Office of the Public Utilities Commission recommended Southern California Edison accelerate the pace of tree attachment removals.

The Small Business Utility Advocates supported Southern California Edison's covered conductor proposals, but sought additional undergrounding of powerlines in areas that are likely to be subject to frequent public safety power shutoff events, especially for areas with small business communities. The Small Business Utility Advocates argued that the cost difference between covered conductors and undergrounding would be less than projected in the application. The Small Business Utility Advocates also supported the replacement of fuses, but not the installation of fuses on previously unfused branchlines or remote-controlled automatic reclosers arguing those were a reliability benefit and not wildfire mitigation.

The Small Business Utility Advocates opposed Southern California Edison's proposed situational awareness proposals due to concerns about privacy and the potential redundancy with publicly available weather information. The Small Business Utility Advocates also opposed the public safety power shutoff outreach measures as Southern California Edison had not assessed the number of customers affected by public safety power shutoff events. The Small Business Utility Advocates proposed Southern California Edison establish a mitigation and compensation fund for small businesses impacted or likely to be impacted by public safety power shutoff events. Both the Small Business Utility Advocates and TURN advocated to reduce the amount authorized for enhanced vegetation management based on the lack of a complete scope of work and the lack of demonstration that the large-scale removal of healthy vegetation would reduce ignition risk.

TURN supported limiting covered conductor installation to 433 circuit miles based on its concerns with Southern California Edison's prioritization methodology. TURN also supported installation of current limiting fuses on unbranched lines, but opposed replacement of existing fuses, arguing Southern California Edison did not demonstrate such replacements were necessary or effective to minimize ignition risk.

The Public Advocates Office of the Public Utilities Commission, The Small Business Utility Advocates, and TURN all opposed the two-way balancing account and reasonableness threshold as the Grid Safety and Resiliency Program activities are new or relatively untested. The Public Advocates Office of the Public Utilities Commission and TURN sought to implement metrics to quantitatively demonstrate the benefits of the Grid Safety and Resiliency Program in reducing wildfire risk. The Public Advocates Office of the Public

Utilities Commission recommended a reasonableness review of recorded costs and TURN recommended a combination of after-the-fact reasonableness review and caps on authorized amounts of spending and authorized units of work underlying the adopted forecast.

2. Issues Before the Commission

The issues identified in the Scoping Memo were determined to be:

1. Whether Southern California Edison's proposed Grid Safety and Resiliency Program is reasonable?
 - a. Whether the Grid Safety and Resiliency Program is a reasonable investment to address wildfire risks facing Southern California Edison's electrical lines and equipment, customers, and communities located in high fire risk areas?
 - b. Whether Southern California Edison demonstrated that its proposed additional grid hardening measures, including deployment of covered conductor, will significantly mitigate wildfire risk in its service area, and to what extent?
 - c. Whether Southern California Edison demonstrated that its proposed situational awareness measures, including deployment of high-definition cameras and weather stations, will significantly mitigate wildfire risk in its service area?
 - d. Whether Southern California Edison demonstrated that its proposed enhanced operational practices, including the use of infrared cameras to inspect electrical facilities in high fire risk areas, will significantly mitigate wildfire risk in its service area?
 - e. Whether Southern California Edison demonstrated that it is reasonable to adopt all proposed mitigation measures simultaneously?
 - f. What data will be collected and reported to measure and evaluate the effectiveness of the mitigation measures Southern California Edison has proposed?

2. Whether Southern California Edison's cost forecast in support of its Grid Safety and Resiliency Program activities is reasonable and cost effective?
 - a. Whether Southern California Edison's proposed activities appropriately balance safety and cost considerations for the benefit of all ratepayers?
 - b. Are grid safety and resiliency program costs incremental to those currently authorized in rates or requested in A.16-09-001, Southern California Edison's pending 2018 General Rate Case proceeding?
 - c. Are grid safety and resiliency program costs separate and distinct from any wildfire mitigation costs subject to FERC jurisdiction?
 - d. Whether Southern California Edison should have to demonstrate that it has met the criteria for Z-factor recovery as a large majority of the proposed activities fall outside the 2018 test year? Or, whether there is some alternative basis to justify recovery of these costs proposed between General Rate Case proceedings?
 - e. Whether the requested level of Operation and Maintenance expense or capital expenditures requested by Southern California Edison is reasonable or whether an alternative level of expenses and capital investment should be authorized?
 - f. Whether the annual expenses and capital investment authorized for recovery in the memorandum account should be capped at specific amounts?
3. Whether the timeline proposed by Southern California Edison is reasonable?
 - a. Whether Southern California Edison has appropriately prioritized deployment of covered conductor and other proposed mitigation measures?
4. Whether Southern California Edison's proposed cost recovery mechanisms are reasonable?

- a. Whether costs should no longer be included in the grid safety and resiliency program memorandum account after December 31, 2020 as future wildfire mitigation costs will be included in the normal general rate case process?
 - b. Whether the “reasonableness threshold” proposed by Southern California Edison is appropriate for these costs?
 - c. Whether alternative ratemaking approaches should be considered and adopted if deemed to strike a better balance between safety and cost considerations for the benefit of all ratepayers?
5. Whether Southern California Edison’s program as proposed is the most reasonable allocation of resources at this time?
 - a. Whether Southern California Edison should be able to substitute any mitigation measure deemed more effective in Rulemaking 18-10-007 for the activities in this application?

3. Proposed Settlement

On June 28, 2019, the parties held a duly-noticed all-party formal settlement conference in compliance with Rule 12.1(b), which resulted in the execution of the Settlement Agreement Resolving All Issues for Southern California Edison Company’s (U 338-E) Grid Safety and Resiliency Program Application (Settlement Agreement). On July 31, 2019, the settling parties filed a Joint Motion and the associated Settlement Agreement with the Commission seeking adoption of the Settlement Agreement as a final resolution of this matter.

On August 30, 2019, the Office of the Safety Advocate submitted comments opposing the Settlement Agreement as written. The Office of the Safety Advocate opposed the provisions of the Settlement Agreement that would halve the forecasted number of trees slated for removal and caps the costs that

can be recovered for tree removal at 125 percent of the average authorized unit cost for each tree removed.⁹ The Office of the Safety Advocate also opposed the reduction, when compared to the application, of the number of conventional exempt fuses that Southern California Edison must replace.

Southern California Edison submitted reply comments on September 16, 2019, stating the proposed changes sought by the Office of the Safety Advocate should be rejected as the changes are not required and the overall package submitted by the settling parties is reasonable and in the public interest. Southern California Edison states that the tree removal language offered by the Office of the Safety Advocate is not far removed from Southern California Edison's original proposal, and the change to the current limiting fuses is not materially different as the Settlement Agreement already calls for a reasonableness review for current limiting fuses installed over 2,251 units.

3.1. Settlement of Southern California Edison's Grid Safety and Resiliency Program

The settling parties agree the forecast of replacement of certain exempt fuses in 2018-2020 will be halved, representing a decrease of about 12.5 percent in the total budget forecast for fuse installation/replacement. The settling parties also agree the removal of tree attachments will be accelerated to the extent possible given personnel requirements, staffing availability, and consistency with Southern California Edison's latest risk prioritization methodology. In addition, the settling parties agree Southern California Edison will assess the estimated number and class of customers potentially affected by public safety power shutoff (PSPS) in specific locations and use this data as one factor in the overall

⁹ The settled average authorized unit cost is \$2,018 per tree removed. Settlement Agreement at 8, Table C-1.

consideration of the prioritization of remaining covered conductor upgrades proposed in the Grid Safety and Resiliency Program and appropriateness of potential alternative mitigations, including undergrounding. The settling parties agreed to Southern California Edison's forecast mileage for covered conductor installation.

The settling parties also agreed to accept Southern California Edison's situational awareness proposals on the condition that Southern California Edison develops a privacy policy with regard to the use of the HD cameras. In addition, Southern California Edison will make its weather data available at no cost to nonprofit organizations, academic institutions, public agencies and public safety entities.

The settling parties agreed to halve the target number of tree removals, and tree removal expenses will be separately subject to balancing account treatment. Further, Southern California Edison will participate in a study to evaluate the need for and effectiveness of its current risk calculator in promoting tree removal to reduce wildfire ignition risks, considering other mitigation measures implemented by Southern California Edison. Southern California Edison also expects to install much more covered conductor than it had originally forecast based on an enhanced prioritization methodology.

The settling parties agreed to a number of measures to address the cost recovery issues raised in the application. First, Southern California Edison will establish a balancing account where unspent funds will be returned to ratepayers. Costs exceeding 100 percent of the settled amounts will be subject to a reasonableness review with the exception of a) Southern California Edison's Wildfire Covered Conductor Program, for which costs exceeding 115 percent of the settled amounts will be subject to a reasonableness review, and b) Southern

California Edison's tree removal activities, which will be limited to costs for removing up to 22,500 trees. Second, the amount of average unit costs exceeding 100 percent of the settled average unit costs will be subject to a reasonableness review, with the exception of a) covered conductor, which will have the amount of average unit costs exceeding 115 percent of the settled average unit costs subject to a reasonableness review, and b) tree removal, which will have the amount of average unit costs exceeding 100 percent and less than 125 percent subject to a reasonable ness review, and no opportunity for Southern California Edison to recover the amount of average unit costs over 125 percent of the settled average unit costs. Third, Southern California Edison agreed to develop and apply output-based performance metrics as required by Decision (D.) 19-05-036. Fourth, Southern California Edison will meet several reporting requirements, including a) an explanation for the variation between settled spending amounts for Grid Safety and Resiliency Program programs and recorded spend, b) an explanation for the variation between settled average unit costs and recorded average unit costs, and c) continuation though the end of 2020 of the monthly reporting consultation and notice requirements set forth in Ordering Paragraphs 5 through 8 of D.19-01-091. Southern California Edison shall file a Tier 2 advice letter within 60 days of the approval of the Settlement Agreement to establish the Grid Safety and Resiliency Program Balancing Account and provide the updated annual Grid Safety and Resiliency Program revenue requirements adjusted, if necessary, given the 2018 GRC decision and AB 1054, including but not limited to Pub. Util. Code § 8386.3(e).

3.1.1. Settlement Agreement Between the Parties

In accordance with Article 12 of the Rules, on July 31, 2019, the settling parties (The Public Advocates Office of the Public Utilities Commission,

Coalition of California Utility Employees, Small Business Utility Advocates, The Utility Reform Network, and Southern California Edison) submitted a fully executed “Settlement Agreement Resolving All Issues for Southern California Edison Company’s (U338E) Grid Safety and Resiliency Program Application” (Settlement Agreement) with their Joint Motion seeking Commission approval of the Settlement Agreement. The settling parties requested that the Commission approve the Settlement Agreement pursuant to rule 12.1 *et. seq.* A copy of the Settlement Agreement, which resolves Southern California Edison’s Grid Safety and Resiliency Program Application in its entirety, is attached hereto as Appendix 1.

As reflected in the Settlement Agreement, based upon the mutual agreement of the parties, the parties agree to a resolution of Southern California Edison’s (SCE) Grid Safety and Resiliency Program (GSRP) Application as follows:¹⁰

A. ISSUES ADDRESSED IN THE SETTLEMENT

The Settling Parties intend the Settlement Agreement to be a complete resolution of all issues identified in the Scoping Memo. Uncontested issues in SCE’s Application are incorporated by reference into, and adopted in, this Settlement Agreement.

B. PROGRAM SPECIFICS

- 1) The Settling Parties agree that SCE’s forecasted scope and cost of its GSRP programs as set forth in the GSRP Application, SCE’s Prepared Testimony, and as explicitly modified below, are reasonable, consistent with the law, and in the public interest;

¹⁰ Settlement Agreement at 5-11 (footnotes omitted). All monetary values used in the Settlement Agreement reflect 2018 constant dollars, unless otherwise noted.

- 2) SCE's requested cost authorization for O&M costs for Current Limiting Fuses (CLFs) in its 2018-2020 GSRP Fusing Mitigation shall be reduced from \$22,656,000 to \$11,328,000, reflecting the reduction of its forecasted replacement of conventional exempt fuses from 5102 units to 2,551 units (by 2,551 units);
- 3) SCE's requested cost authorization related to its Tree Removal shall be reduced from \$90,653,000 to \$45,326,500 in O&M, reflecting the reduction of its forecasted removal of trees from 45,000 trees to 22,500 trees;
- 4) SCE will accelerate Tree Attachment removals as part of its WCCP to the extent possible given personnel requirements, resource availability, and consistency with SCE's continual risk prioritization methodology improvements. Funding will come from the WCCP and the rate recovery will be subject to the same terms as the rest of the WCCP;
- 5) SCE will develop a policy for taking privacy into account in implementing the HD Camera program to avoid privacy intrusion and will create a procedure for approving public requests to adjust or limit cameras' angles in response to requests from individuals;
- 6) Data from the weather stations installed under GSRP will be made available, at no cost, at a minimum, to nonprofit organizations, academic institutions, public agencies, and public safety entities; and
- 7) As part of the 2019 WMP, SCE is currently conducting an assessment to determine if certain areas should be considered for alternative mitigation, including undergrounding. This assessment is intended to be completed by the end of 2019 and prior to completion of the full scope of covered conductor installation addressed in this Settlement Agreement. In deciding whether certain circuits or portions of circuits currently proposed to be upgraded to covered conductor should be considered for alternative mitigation, including undergrounding, SCE will take various factors into

consideration, including the pace at which alternative mitigation can be accomplished, the feasibility and cost of alternative mitigation in particular areas, the risk of ignition posed by overhead conductor in these areas, and the possible prevention of PSPS effects on customers and users, including small businesses. In order to determine the PSPS effects that may potentially be avoided, SCE will assess the potential source location, impact area, frequency and duration of PSPS events. SCE will use this analysis to assess the estimated number and class of customers, including small commercial customers, potentially affected by PSPS in specific locations.

As detailed above, this data will be used as one factor in the overall consideration of the appropriateness of potential alternative mitigations, including undergrounding.

C. RATEMAKING ELEMENTS

- 1) All revenue requirements associated with GSRP capital and O&M expenditures shall be recorded in the GSRP Balancing Account;
- 2) Excluding WCCP costs, all recorded GSRP capital and O&M recorded costs in excess of \$122,449,000 (capital) and \$113,625,000 (O&M) shall be subject to Reasonableness Review, unless otherwise provided for in this Agreement;
- 3) SCE's recovery of recorded amounts for Tree Removal shall be capped at a level no higher than 125% of Average Authorized Unit Cost for each tree removed;
- 4) SCE shall not have the opportunity to recover recorded amounts for Tree Removal in excess of 22,500 trees over the 2018-2020 period;
- 5) No Reasonableness Review is required for recorded costs for WCCP up to 115% of forecast costs of \$284,842,000 (capital) and \$5,899,000 (O&M). Recorded costs in excess of 115% of forecast costs shall be subject to Reasonableness Review;

- 6) If the Average Recorded Unit Cost for an item in Table C-1 exceeds its Average Forecast Unit Cost, SCE's recovery of the amount by which Average Recorded Unit Cost exceeds Average Authorized Unit Cost shall be subject to Reasonableness Review, with the exception of Covered Conductor, for which SCE's recovery of the amount by which Average Recorded Costs exceeds 115% of Average Authorized Unit Cost shall be subject to Reasonableness Review;

Table C-1

Average Authorized Unit Costs

Item	Average Authorized Unit Cost (2018 dollars)
Covered Conductor (Capital)	\$428,000 per circuit mile
Tree Removal (O&M)	\$2,018 per tree removed
Current Limiting Fuses (Capital)	\$5,962 per Current Limiting Fuse
Current Limiting Fuses (O&M)	\$4,441 per Current Limiting Fuse
High Definition Camera (Capital)	\$25,850 per High Definition Camera
Weather Station (Capital)	\$16,920 per Weather Station
Remote-Control Automatic Reclosers (Capital)	\$94,765 per Remote-Control Automatic Recloser

- 7) SCE will not be subject to disallowance or reduced authorized return associated with existing investment in recently replaced poles that are replaced in connection with GSRP activities; and
- 8) SCE will file a Tier 2 advice letter within 60 days of the approval of this Settlement Agreement to establish the GSRP balancing account and provide the updated annual GSRP revenue requirements based on \$407,291,000 (Capital) and \$119,164,000 (O&M).

D. REPORTING ELEMENTS

- 1) In March 2021, SCE will present a narrative explanation addressing any variation between the Settled Position amounts for Capital Expenditures listed in the attached Table A-1, cells G1-G7 and for O & M Expenditures listed in Table A-2, cells G1-G15 [attached as Appendix 1 hereto], and the recorded spending.
- 2) In March 2021, for each GSRP component SCE will present a narrative explanation addressing the variation between the Average Authorized Unit Costs and the Average Recorded Unit Costs.
- 3) The reporting, consultation and notice requirements set forth in Ordering Paragraphs 5 through 8 of D.19-01-091 shall continue through the end of 2020 (with a final report by May 2021). The monthly reports will also include for each GSRP component information on the authorized unit cost and work units, and recorded unit costs and work units to-date.

E. INDEPENDENT EVALUATION OF TREE REMOVAL

- 1) SCE agrees to an independent study (Tree Removal Study) to evaluate the need and effectiveness of its current Tree Calculator in implementing Tree Removal that effectively reduces wildfire risks, considering other mitigation measures implemented by SCE.
- 2) The Tree Removal Study will be funded by ratepayers up to \$750,000.
- 3) The Tree Removal Study will be conducted by a consulting firm or individual subject matter experts (Study Consultants) mutually chosen by Settling Parties.
- 4) The Study Consultant(s) will include at least one arborist with significant experience conducting tree trimming and/or removal for utilities, and one distribution engineer with at least 10 years of experience in fault protection.
- 5) The Study Consultant(s) will:

- a) Evaluate risk of vegetation faults, taking into account potential reconductoring with covered conductor and trees that could fall into SCE's lines;
 - b) Evaluate effectiveness of SCE's Tree Calculator and Tree Removal in the mitigation of wildfires; and
 - c) By no later than March 31, 2020, produce a summary report with recommendations subject to the onboarding of the Study Consultant(s) and their ability to produce a summary report by this date. If the Study Consultant(s) are not able to produce a summary report by this date, whether it be due to a late onboarding process or for other reasons, the Settling Parties agree to work with the Study Consultant(s) to produce the summary report at the earliest possible date.
- 6) The results of the Tree Removal Study shall not impact the terms of this Settlement Agreement (e.g. cannot be used to increase or disallow funds otherwise stipulated to be authorized here).

F. METRICS

SCE will develop and apply output-based performance metrics as required by D.19-05-036. Output-based performance metrics will be proposed by SCE as part of the "Data Collection for Wildfire Mitigation Plans" Report due July 30, 2019, established in Decision 19-05-036, Ordering Paragraph 2.

The record of this proceeding shows that the Public Advocates Office of the Public Utilities Commission, Small Business Utility Advocates, and The Utility Reform Network all actively engaged with Southern California Edison in this proceeding. The Public Advocates Office of the Public Utilities Commission, Small Business Utility Advocates, and The Utility Reform Network all filed protests to Southern California Edison's Application timely; and raised relevant questions to test and confirm Southern California Edison's assumptions and

projections regarding the Grid Safety and Resiliency Program costs, proposed actions, accounting, and end-user rates, among other issues. The issues raised in the respective protests are referenced above.

The settling parties participated in the prehearing conference held on November 14, 2018. The settling parties submitted testimony, and attended or reviewed the transcripts of the public participation hearings held on May 15, 2019 and May 16, 2019, in Rialto, California and Oxnard, California, to obtain comments and feedback from customers of Southern California Edison.

In their evaluation of Southern California Edison's Application and requests, the Public Advocates Office of the Public Utilities Commission, Small Business Utility Advocates, and The Utility Reform Network requested extensive information from Southern California Edison in order to examine the issues raised by the Application and test the validity of Southern California Edison's statements and conclusions. Southern California Edison responded to the questions and provided the requested information and materials. The Public Advocates Office of the Public Utilities Commission, Small Business Utility Advocates, and The Utility Reform Network all served testimony of their witnesses on April 23, 2019. Southern California Edison and the Small Business Utility Advocates served rebuttal testimony of their witnesses on May 31, 2019.

The work of the Public Advocates Office of the Public Utilities Commission, Small Business Utility Advocates, and The Utility Reform Network in this proceeding was helpful and persuasive, and their effective advocacy in this proceeding is a contributing factor to the Administrative Law Judge's recommendation that the Settlement Agreement be adopted by the Commission.

The settling parties assert that the Settlement Agreement is fair and reasonable in light of the whole record and thus consistent with Commission

decisions on settlements.¹¹ Further, the settling parties assert their proposed settlement further many worthwhile goals, including reducing the expense of litigation, conserving scarce Commission resources, and allowing parties to reduce the risk that litigation will produce unacceptable results,¹² and that the settlement taken as a whole is reasonable in light of the record, consistent with the law, and is in the public interest, and thus should be adopted without change.

3.1.2. Settlement Agreement and Rule 12.1 Analysis

In evaluating a settlement, the Commission is guided by Rule 12.1(d), which requires that the settlement be reasonable in light of the whole record, consistent with law, and be in the public interest.¹³ Generally, the parties' evaluation carries material weight in the Commission's review of a settlement, however, our duty to fix just and reasonable rates requires that the final responsibility to support and interpret the decision rests with us.¹⁴

Certain wildfire mitigations proposed by Southern California Edison were uncontested, specifically, infrared inspection of lines, the provision of emergency backup generators and portable community power vans, and the wildfire mitigation program study. Based on the record presented,¹⁵ we agree that these uncontested matters are reasonable and adoption is in the public interest.

¹¹ Settlement Motion at 10 *citing* D.88-12-083 (30 CPUC 2d 189, 221-223) and D.91-05-029 (40 CPUC 2d, 301, 326).

¹² Settlement Motion at 10 *citing* D.92-12-019, 46 CPUC 2d 538, 553.

¹³ Rule 12.1(d); *See also*, D.98-12-075 (84 CPUC2d 155, 188-190).

¹⁴ *See*, In re Southern California Gas Co., D.00-09-034, 2000 Cal. PUC LEXIS 694 at 27-31, *citing*, In re Pacific gas and Electric Company, D.88-12-083, 30 CPUC2d 189, 225.

¹⁵ *See*, SCE Testimony, Chapters IV.D.2, IV.D.4, IV.D.5, and IV.E.

In addition, no settling party opposed the use of covered conductor. However, parties did have concerns about the feasibility of the pace, prioritization, need for ongoing measurement of effectiveness, and consideration of undergrounding. Southern California Edison has been able to revise its installation forecast and prioritization methodology since it initially proposed the first large-scale deployment of covered conductor in California in the Grid Safety and Resiliency Program Application,¹⁶ and has addressed much of the concerns initially raised by intervening parties.¹⁷ The Settlement Agreement adopts Southern California Edison's forecast for covered conductor mileage. In addition, Southern California Edison has agreed to consider the impact of potential public safety power shutoff events when determining where to install alternative mitigations, including undergrounding.

With regard to concerns about fusing, the parties settlement adopts a fuse replacement rate that is more moderate than that proposed by Southern California Edison, while maintaining Southern California Edison's request for installing fuses on unfused lines, thus prioritizing mitigation actions that have greater impact in reducing potential wildfire ignition sources.

Southern California Edison addressed most of the issues raised by the Small Business Utility Advocates regarding the situational awareness proposals in the Grid Safety and Resiliency Program in its rebuttal testimony. Specifically, Southern California Edison explained how high-definition cameras were deployed in conjunction with California Department of Forestry and Fire Protection (CAL FIRE) and its contract fire agencies and that the weather data

¹⁶ See, SCE Rebuttal Testimony, Chapters II.A.2 and III.A.2.

¹⁷ See, Joint Motion seeking Commission approval of the Settlement Agreement at 11.

that would be obtained by Southern California Edison's proposed measures was not currently publicly available. The Small Business Utility Advocates' additional concerns about privacy issues, weather data sharing, and consideration of potential public safety power shutoff impacts are further addressed in the Settlement Agreement. Southern California Edison will formalize its current privacy practices with respect to high definition cameras and will share weather data at no cost with nonprofit organizations, academic institutions, public agencies and public safety entities in California. In addition, Southern California Edison will assess the estimated number and class of customers potentially affected by public safety power shutoff in specific locations and use this data as one factor in the overall consideration of the prioritization of remaining covered conductor upgrades proposed in the Grid Safety and Resiliency Program and appropriateness of potential alternative mitigations, including undergrounding.

Southern California Edison and the other settling parties resolved the operational practices issues by agreeing that the removal of a total of 22,500 trees is reasonable. In its testimony Southern California Edison estimated it would remove 7,500 trees in 2019 and 15,000 trees in 2020, though the cost forecast was based on a higher aspirational target.¹⁸ The settling parties agreed that completion of a study evaluating the effectiveness of the tree calculator will provide reassurance that the most effective mitigation measures are being pursued. The settling parties argue that by agreeing on a total number of trees to be removed they provide flexibility to Southern California Edison to increase the scope of wildfire mitigations, while building in rate protections for ratepayers

¹⁸ SCE Testimony at 125.

through a reasonableness review of recorded costs in excess of the settled amounts and reporting requirements. The settlement protects ratepayers against increases in expenses for tree removal by providing a balancing account, with a potential reasonableness review for recovery of costs overruns caused by an increase in unit costs of up to 125 percent of forecast costs, but not due to an increase in tree removals. The settling parties also expect the resulting metrics will assist in the development of future wildfire mitigation plans.

With regard to the comments and proposed modifications of the settlement submitted by the Office of the Safety Advocate, we do not find the proposed modifications are needed to ensure a safe system. When we authorized Southern California Edison Company to establish the Grid Safety and Resiliency Program Memorandum Account, we established reporting requirements to monitor the costs booked to the Grid Safety and Resiliency Program Memorandum Account over the course of this proceeding. In reviewing those reports for the end of 2019 we can see that the actual operations and maintenance costs of Southern California Edison are less than originally forecast for both vegetation management and replacement of current limiting fuses.¹⁹ Thus, contrary to the opposition of the Office of the Safety Advocate, it appears the settlement reasonably reflects a more accurate assessment of what Southern California Edison could accomplish over the period covered by this application. In addition, the proposed modifications put forth by the Office of the Safety Advocate would not require Southern California Edison to actually do

¹⁹ See, Southern California Edison Company's Grid Safety and Resiliency Program Report - December 2019 submitted pursuant to Ordering Paragraphs 5 and 6 of D.19-01-019 (O&M recorded is less than forecast by \$2,632,000, while capital recorded costs exceed forecast by \$34,623,000).

more work to ensure a safe system, nor would it materially alter the examination of the costs of the work. Further, the proposed modifications would not alter our conclusion that the settlement, as presented, is reasonable in light of the whole record, consistent with the law, and in the public interest. Therefore, we are not persuaded by the arguments put forward by the Office of the Safety Advocate to alter the settlement pursuant to Rule 12.4.

The Settlement Agreement largely resolves each and every issue identified in the Scoping memo issued on May 9, 2019, addresses issues raised in protests, and is a reasonable resolution of these issues. Pursuant to the Settlement Agreement, Southern California Edison agrees to establish a balancing account where unspent funds will be returned to ratepayers and costs exceeding the settled amounts will be subject to a reasonableness review, with the exception of a) Southern California Edison's Wildfire Covered Conductor Program, where costs exceeding 115 percent of the settled amounts will be subject to a reasonableness review and b) Southern California Edison's tree removal activities, which would be limited to costs for removing up to 22,500 trees.

Additionally, the parties agreed upon a number of average unit costs and any amount exceeding 100 percent of any settled average unit cost will be subject to a reasonableness review, with the exception of a) covered conductor, where average unit costs exceeding 115 percent of the settled average unit cost would be subject to a reasonableness review, and b) tree removal, where average unit costs exceeding 100 percent and up to 125 percent, inclusive, of the settled average unit cost would be subject to a reasonableness review. Southern California Edison would have no opportunity to recover any amount of average unit costs over 125 percent of the settled average unit cost for tree removal.

Further, Southern California Edison agreed to develop and apply output-based performance metrics as required by D.19-05-036. The output-based performance metrics will be proposed by Southern California Edison as part of the “Data Collection for Wildfire Mitigation Plans” Report of July 30, 2019, established in D.19-05-036, Ordering Paragraph 2.

Finally, Southern California Edison agreed to several reporting requirements, which include the requirement to explain the variation between spending amounts agreed to in the Settlement Agreement for Grid Safety and Resiliency Program programs and recorded spend, the variation between settled average unit costs and recorded average unit costs. Southern California Edison will also continue the monthly reporting consultation and notice requirements set forth in Ordering Paragraphs 5 through 8 of D.19-01-091 through the end of 2020. Southern California Edison will file a Tier 2 advice letter within 60 days of the approval of this Settlement Agreement to establish the Grid Safety and Resiliency Program Balancing Account and provide the updated annual Grid Safety and Resiliency Program revenue requirements adjusted, if necessary, given the 2018 GRC decision and AB 1054, including but not limited to newly created section 8386.3(e) of the Public Utilities Code.

In addition, we approve the request in Southern California Edison’s application for amounts recorded in the Grid Safety and Resiliency Program Memorandum Account to transfer to the Grid Safety and Resiliency Program Balancing Account on a final Commission decision.²⁰ Therefore, Southern California Edison will include in its Tier 2 advice letter the specific amounts in the Grid Safety and Resiliency Program Memorandum Account that are

²⁰ Application at 9.

transferred to the Grid Safety and Resiliency Balancing Account, and close the Grid Safety and Resiliency Program Memorandum Account. Costs recorded in excess of the settlement amounts (and reasonableness threshold, where applicable) are subject to a reasonableness review, either in the next GRC or through a separate application.

Overall, the record of this proceeding demonstrates that the Settlement Agreement is reasonable in light of the whole record, consistent with law, and is in the public interest, as discussed above. The proposed Settlement Agreement is reasonable because it save the Commission and parties significant time, and protects the public interest when compared to the uncertain risk, expense, and complexity of a litigated outcome.

The proposed settlement is supported by the record in this proceeding and the settlement benefits the public by ensuring that: (1) Southern California Edison will conduct infrared inspection of its lines, provide emergency backup generators and portable community power vans, and conduct a wildfire mitigation program study; (2) Southern California Edison will use its enhanced prioritization method to install more covered conductor in high risk ignition areas; (3) Southern California Edison will take into account the impact of potential public safety power shutoff events when determining where to install alternative mitigations, including undergrounding; (4) use Southern California Edison's forecast for covered conductor mileage; (5) use Southern California Edison's forecast for installing fuses on unfused lines, and use a more moderate fuse replacement rate; (6) Southern California Edison will deploy high definition cameras in conjunction with CAL FIRE and its contract fire agencies; (7) Southern California Edison will collect weather data that is not currently publicly available and share it with other entities; (8) Southern California Edison

will formalize its current privacy practices with regard to high definition cameras; (9) Southern California Edison will be able to meet its estimated tree removal target of 22,500 trees and complete a study evaluating the effectiveness of the tree calculator.

The settled rate recovery terms are reasonable as they provide flexibility for Southern California Edison to increase the scope of wildfire mitigations if it sees the need to, while building in rate protections for ratepayers in the form of reporting requirements and metrics that will assist in development of future wildfire mitigation plans, and a reasonableness review of recorded costs in excess of the settled amounts. The settlement protects ratepayers against increases in expenses for tree removal by providing a balancing account, with a potential reasonableness review and recovery of cost overruns only due to an increase in unit costs of up to 125 percent of forecast costs, but not due to an increase in tree removals.

While the Settlement Agreement is binding on the parties, it creates no precedent on the Commission. The Settlement Agreement preserves the Commission's authority and jurisdiction over each and every issue in this proceeding, and over the parties with regards to interpretation, implementation, and enforcement of the Settlement Agreement. The record in this proceeding, including the Settlement Agreement, provides sufficient information to enable the Commission to enforce its terms and discharge the Commission's future regulatory responsibilities with respect to the parties and interests in this proceeding. The settlement does not contravene any statutory provisions or prior Commission decisions.

In conclusion, the Settlement Agreement fairly resolves all issues in this proceeding, and complies with Rule 12.1(d). Accordingly, the Commission should adopt the Settlement Agreement.

4. Requests to Admit Testimony

As noted above, prepared testimony was served according to the schedule set forth in the Scoping Memo. Southern California Edison, TURN, the Public Advocates Office of the Public Utilities Commission, and the Office of the Safety Advocate all submitted motions pursuant to Rule 13.8 to admit their testimony into the record of this proceeding.

Southern California Edison submitted a Motion to Offer Prepared Testimony into Evidence on July 31, 2019 that sought to move into evidence:

- 1) Exhibit SCE-01 – Prepared Testimony in Support of SCE’s Application for Approval of Its Grid Safety and Resiliency Program;
- 2) Exhibit SCE-01A – Prepared Testimony in Support of SCE’s Application for Approval of Its Grid Safety and Resiliency Program – Annotated;
- 3) Exhibit SCE-01A-Amended – Amended Prepared Testimony in Support of SCE’s Application for Approval of Its Grid Safety and Resiliency Program – Annotated;
- 4) Exhibit SCE-01A-Second Amended – Second Amended Prepared Testimony in Support of SCE’s Application for Approval of Its Grid Safety and Resiliency Program – Annotated;
- 5) Exhibit SCE-02 – Rebuttal Testimony in Support of SCE’s Application for Approval of its Grid Safety and Resiliency Program; and
- 6) Exhibit SCE-02A – Amended Rebuttal Testimony in Support of SCE’s Application for Approval of its Grid Safety and Resiliency Program.

TURN submitted a Motion to Enter Testimony into the Evidentiary Record on August 1, 2019, that sought to move into evidence:

- 1) REVISED Prepared Testimony of Robert Finkelstein and Marcel Hawiger Addressing Southern California Edison's Grid Safety & Resiliency Program Infrastructure Proposal (served June 20, 2019); and
- 2) Attachment to REVISED Prepared Testimony of Robert Finkelstein and Marcel Hawiger Addressing Southern California Edison's Grid Safety & Resiliency Program Infrastructure Proposal (served June 20, 2019).

The Public Advocates Office of the Public Utilities Commission submitted a Motion to Offer Testimony into Evidence on August 2, 2019, that sought to move into evidence:

- 1) Exhibit CPAO-01 – Public Advocates Office Prepared Testimony on the Application of Southern California Edison Company for Approval of Its Grid Safety and Resiliency Program (GSRP) (Witnesses: M. Botros/S. Chase/N. Stannik)
- 2) Exhibit CPAO-02 – Prepared Testimony on the Application of Southern California Edison Company for Approval of Its Grid Safety and Resiliency Program (GSRP) (Witness: S. Logan)
- 3) Exhibit CPAO-03 – Public Advocates Office – Supporting Attachments (Witnesses: M. Botros/S. Chase/N. Stannik)

The Office of the Safety Advocate submitted a Motion to Offer Testimony into Evidence on August 30, 2019, that sought to move into evidence:

- 1) Exhibit OSA-1 – Prepared Testimony of Joan Weber on Application of Southern California Edison Company for Approval of its Grid Safety and Resiliency Program.

Southern California Edison submitted a Motion to Offer Two Supplemental Exhibits into Evidence on March 11, 2020 that sought to move into evidence:

- 1) Exhibit SCE-03 – the workpaper showing Southern California Edison’s forecast of weather stations, which is referenced in footnote 8 on page 9 of the Settlement Agreement (appended to the Joint Motion for Approval of the Settlement Agreement filed July 31, 2019); and
- 2) Exhibit SCE-04 – SCE’s data request response to TURN-006, question 23d, which is referenced in footnote 5 on page 8 of the Settlement Agreement.

The Small Business Utility Advocates submitted a Motion to Enter Supplemental Exhibits into Evidence after the March 16, 2020, deadline set by the ruling directing parties to provide a supplemental motion to offer in evidence any and all relevant written testimony needed to fully consider the proposed Settlement Agreement. Accordingly, the Small Business Utility Advocates submitted a Motion to Accept Late Filing on March 20, 2020, seeking acceptance of the late-filed Motion to Enter Supplemental Exhibits into Evidence. The Small Business Utility Advocates sought to move into evidence:

- 1) Exhibit SBUA-01 – Direct Testimony on Grid Safety of Michael Brown on behalf of Small Business Utility Advocates; and
- 2) Exhibit SBUA-02 – Rebuttal Testimony of Expert Michael Brown on behalf of Small Business Utility Advocates.

The March 20, 2020, Motion of the Small Business Utility Advocates to accept the late filing of the March 16, 2020, motion is granted. All testimony listed in the respective motions by Southern California Edison, TURN, the Public Advocates Office of the Public Utilities Commission, the Small Business Utility Advocates, and the Office of the Safety Advocate listed above and uploaded to the supporting documents website should be admitted into the record of this proceeding with the exception of proposed Exhibit SCE-04 which can already be

found at page 166 of the attachment to the Revised Prepared Testimony of Robert Finkelstein and Marcel Hawiger.

5. Conclusion

This decision approves Southern California Edison's request to begin replacing standard overhead conductor with covered conductor, which is covered with special layers of insulation materials that protect electric lines against contacts from foreign objects. Southern California Edison will also install fire resistant, composite poles as part of this effort when appropriate. Southern California Edison will also begin phasing out tree attachments as part of its covered conductor program.

Additionally, this decision approves Southern California Edison's proposal to focus on limiting potential faults from igniting wildfires by adding/replacing certain devices on its system to mitigate fault-related ignition risks. Southern California Edison will install additional fuses that activate quickly to reduce the energy transmitted due to faults, and accordingly, further reduce the risk of ignitions from faults. Southern California Edison will also install remote-controlled automatic reclosers and circuit breakers that will enable recloser relay blocking during red flag warnings, which may reduce the frequency and duration of some public safety power shutoff events.

The Grid Safety and Resiliency Program approved by this decision provides broader and more advanced measures than those described in Southern California Edison's 2018 General Rate Case Application (A.) 16-09-001. This decision authorizes the 2018-2020 program costs for Southern California Edison's Grid Safety and Resiliency Program to incorporate leading practices and mitigation measures selected based on their effectiveness and with appropriate consideration of potential costs. These measures will help enhance the safety of

Southern California Edison's electrical system and make it more resilient during wildfires.

The decision also establishes a Grid Safety and Resiliency Program Balancing Account to record all revenue requirements associated with the Grid Safety and Resiliency Program capital and O&M expenditures and allow Southern California Edison recovery of approved costs associated with implementing this program. Unspent funds in that account will be returned to ratepayers while costs exceeding the agreed-to and established by this decision will be subject to a reasonableness review.

6. Comments on Proposed Decision

The proposed decision of Administrative Law Judge Haga in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on March 20, 2020, by the Small Business Utility Advocates, and on April 6, 2020, by Southern California Edison Company. No reply comments were filed.

In response to comments, changes have been made throughout the decision to improve clarity. Southern California Edison Company raised a new issue in its comments that we decline to adopt. Specifically, Southern California Edison Company sought permission in this decision to collect the entirety of the revenue requirement associated with the costs approved in this decision in 2020, instead of collecting it over a twelve-month period as it proposed in its application. Southern California Edison Company's proposal would have had the impact of increasing the average non-CARE residential bill by an additional \$1.79 for the remainder of 2020 (and an additional \$1.21 for average CARE residential customers). We decline to modify the settlement to make such a

change. The record provides no basis for the claim that such a shortened recovery period will have a smoothing effect on customer rates. Accordingly, absent a full and complete consideration of the impacts on ratepayers and Southern California Edison Company, we decline to adopt a change to the settlement that will double the rate increase in response to comments on a proposed decision.

7. Assignment of Proceeding

Marybel Batjer is the assigned Commissioner and Robert Haga is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. On September 20, 2018, Southern California Edison filed an application seeking Commission approval to record and recover the reasonable costs of its Grid Safety and Resiliency Program.
2. The Commission preliminarily categorized this Application as ratesetting, and determined that evidentiary hearings were necessary.
3. The City of Laguna Beach, the Office of the Safety Advocate, the Public Advocates Office of the Public Utilities Commission, the Small Business Utility Advocates, and The Utility Reform Network timely filed protests in this proceeding.
4. The City of Laguna Beach request to be removed as a party to this proceeding was granted on November 15, 2018.
5. On January 10, 2019, the Commission adopted Decision 19-01-019 authorizing Southern California Edison to establish an interim Grid Safety and Resiliency Program Memorandum Account, effective September 10, 2018.

6. Decision 19-01-019 ordered Southern California Edison to serve monthly reports providing a full and complete accounting of amounts recorded in the Grid Safety and Resiliency Program Memorandum Account.

7. On May 15, 2019, a Public Participation Hearing took place in Rialto, California, to obtain comments and feedback from customers of Southern California Edison.

8. On May 16, 2019, a Public Participation Hearing took place in Oxnard, California, to obtain comments and feedback from customers of Southern California Edison.

9. Southern California Edison, the Office of the Safety Advocate, the Public Advocates Office of the Public Utilities Commission, the Small Business Utility Advocates, and The Utility Reform Network served direct testimony of witnesses prepared to testify in support of their respective positions.

10. Southern California Edison and the Small Business Utility Advocates served rebuttal testimony of witnesses prepared to testify in support of their respective positions.

11. The parties engaged in significant data exchanges, contests and analysis of each other's positions and arguments, after which substantive settlement negotiations occurred between the parties.

12. On June 28, the parties held a duly-noticed all-party formal settlement conference in compliance with Rule 12.1(b).

13. Southern California Edison, the Public Advocates Office of the Public Utilities Commission, the Small Business Utility Advocates, and The Utility Reform Network have arrived at a Settlement Agreement resolving all issues in this proceeding.

14. On July 31, 2019, Southern California Edison, the Public Advocates Office of the Public Utilities Commission, the Small Business Utility Advocates, and The Utility Reform Network filed a Joint Motion with the Commission for adoption of the Settlement Agreement.

15. On July 31, 2019, Southern California Edison submitted a Motion to Offer Prepared Testimony into Evidence that sought to move into evidence six exhibits.

16. On August 2, 2019, TURN submitted a Motion to Enter Testimony into the Evidentiary Record that sought to move into evidence two exhibits.

17. On August 2, 2019, the Public Advocates Office of the Public Utilities Commission submitted a Motion to Offer Testimony into Evidence that sought to move into evidence three exhibits.

18. On August 30, 2019, the Office of the Safety Advocate submitted a Motion to Offer Testimony into Evidence that sought to move into evidence one exhibit.

19. On March 11, 2020, Southern California Edison submitted a Motion to Offer Two Supplemental Exhibits into Evidence that sought to move into evidence two exhibits.

20. On August 30, 2019, the Office of the Safety Advocate filed comments on the proposed Settlement Agreement.

21. On September 16, 2019, Southern California Edison filed reply comments to the comments of the Office of the Safety Advocate.

22. Based on our review of all the information in the record we can independently determine and adopt the figures contained in the Settlement Agreement, including Table C-1, Average Authorized Unit Costs.

23. The Settlement Agreement resolves all issues in Southern California Edison's Grid Safety and Resiliency Program Application.

24. Based on the Settlement Agreement, it is reasonable to adopt Southern California Edison's forecasted scope and the costs of its Grid Safety and Resiliency programs as set forth in the Grid Safety and Resiliency Application, except as modified herein and in the Settlement Agreement.

25. Based on the Settlement Agreement, all monetary values used in this decision are in 2018 constant dollars, unless otherwise noted.

26. Based on the Settlement Agreement, it is reasonable to approve the reduced cost authorization for Southern California Edison for O&M costs for Current Limiting Fuses in its Grid Safety and Resiliency Program Fusing Mitigation of \$11,328,000, in 2018 constant dollars, reflecting a reduced forecast replacement of conventional exempt fuses of 2,551 units.

27. Based on the Settlement Agreement, it is reasonable to approve the reduced cost authorization for Southern California Edison related to Tree Removal of \$45,326,500 in O&M, reflecting a reduced forecast removal of 22,500 trees.

28. Based on the Settlement Agreement, Southern California Edison will accelerate Tree Attachment removals as part of its Wildfire Covered Conductor Program to the extent possible given personnel requirements, resource availability, and consistency with its continual risk prioritization methodology improvements. Funding will come from the Wildfire Covered Conductor Program and rate recovery will be subject to the same terms as the rest of the Wildfire Covered Conductor Program.

29. Based on the Settlement Agreement, Southern California Edison will develop a policy for taking privacy into account in implementing the high definition camera program to avoid privacy intrusion and will create a

procedure for approving public requests from individuals to adjust or limit cameras' angles.

30. Based on the Settlement Agreement, Southern California Edison will make data from weather stations installed under the Grid Safety and Resiliency Program available, at no cost, at a minimum, to nonprofit organizations, academic institutions, public agencies, and public safety entities.

31. Based on the Settlement Agreement, in deciding whether certain circuits or portions of circuits should be considered for alternative mitigation, including undergrounding, Southern California Edison will take various factors into consideration, including the pace at which alternative mitigation can be accomplished, the feasibility and cost of alternative mitigation in particular areas, the risk of ignition posed by overhead conductor in these areas, and the possible prevention of public safety power shutoff effects on customers and users, including small businesses.

32. Based on the Settlement Agreement, in order to determine the public safety power shutoff effects that may potentially be avoided, Southern California Edison will assess the potential source location, impact area, frequency and duration of public safety power shutoff events. Southern California Edison will use this analysis to assess the estimated number and class of customers, including small commercial customers, potentially affected by public safety power shutoffs in specific locations. Southern California Edison will also use this data as one factor in the overall consideration of the appropriateness of potential alternative mitigations, including undergrounding.

33. Based on the Settlement Agreement, all revenue requirements associated with the Grid Safety and Resiliency Program capital and O&M expenditures shall be recorded in the Grid Safety and Resiliency Program Balancing Account.

34. Based on the Settlement Agreement, except for Wildfire Covered Conductor Program costs, all recorded Grid Safety and Resiliency Program capital and O&M recorded costs in excess of \$122,449,000 (capital) and \$113,625,000 (O&M) shall be subject to Reasonableness Review, unless otherwise provided for in the Settlement Agreement.

35. Based on the Settlement Agreement, Southern California Edison's recovery of recorded amounts for Tree Removal shall be capped at a level no higher than 125 percent of Average Authorized Unit Cost for each tree removed.

36. Based on the Settlement Agreement, Southern California Edison shall not have the opportunity to recover recorded amounts for Tree Removal in excess of 22,500 trees over the 2018-2020 period.

37. Based on the Settlement Agreement, no reasonableness review is required for recorded costs for Wildfire Covered Conductor Program costs up to 115 percent of forecast costs of \$284,842,000 (capital) and \$5,899,000 (O&M). Recorded costs in excess of 115 percent of forecast costs shall be subject to reasonableness review.

38. Based on the Settlement Agreement, if the average recorded unit cost for Covered Conductor (capital) exceeds its average forecast unit cost of \$428,000 per circuit mile, Southern California Edison's recovery of the amount by which the average recorded costs exceeds 115 percent of the average authorized unit costs shall be subject to reasonableness review.

39. Based on the Settlement Agreement, if the average recorded unit cost for Tree Removal (O&M) exceeds its average forecast unit cost of \$2,018 per tree removed, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

40. Based on the Settlement Agreement, if the average recorded unit cost for Current Limiting Fuses (capital) exceeds its average forecast unit cost of \$5,962 per current limiting fuse, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

41. Based on the Settlement Agreement, if the average recorded unit cost for Current Limiting Fuses (O&M) exceeds its average forecast unit cost of \$4,441 per current limiting fuse, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

42. Based on the Settlement Agreement, if the average recorded unit cost for high definition cameras (capital) exceeds its average forecast unit cost of \$25,850 per high definition camera, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review

43. Based on the Settlement Agreement, if the average recorded unit cost for weather stations (capital) exceeds its average forecast unit cost of \$16,920 per weather station, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

44. Based on the Settlement Agreement, if the average recorded unit cost for remote-control automatic reclosers (capital) exceeds its average forecast unit cost of \$94,765 per remote-control automatic recloser, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

45. Based on the Settlement Agreement, before April 1, 2021, Southern California Edison will present a narrative explanation addressing any variation between the Settled amounts listed in the attached Appendix 1, Table A-1, cells G-1-G-7, and for O&M Expenditures listed in the attached Appendix 1, Table A-2, cells G1-G-15, and the recorded spending.

46. Based on the Settlement Agreement, before April 1, 2021, for each Grid Safety and Resiliency Program component Southern California Edison will present a narrative explanation addressing the variation between the average authorized unit costs and the average recorded unit costs.

47. Based on the Settlement Agreement, the reporting, consultation, and notice requirements set forth in Ordering Paragraphs 5 through 8 of D.19-01-091 shall continue through the end of 2020, with a final report due before June 1, 2021.

48. Based on the Settlement Agreement, the monthly reports will also include for each Grid Safety and Resiliency Program component information on the authorized unit cost and work units, and recorded unit costs and work units to-date.

49. Based on the Settlement Agreement, Southern California Edison agrees to contract with a consulting firm or individual subject matter experts mutually chosen by settling parties, and shall include at least one arborist with significant experience conducting tree trimming and/or removal for utilities, and one distribution engineer with at least ten years' experience in fault protection to evaluate the need and effectiveness of its current Tree Calculator in implementing Tree Removal that effectively reduces wildfire risks, considering other mitigation measures implemented by Southern California Edison. This Tree Removal Study may be funded with up to \$750,000 collected from ratepayers.

50. Based on the Settlement Agreement, the consulting firm or individual subject matter experts will: (a) evaluate risk of vegetation faults, taking into account potential reconductoring with covered conductor and trees that could fall into Southern California Edison lines; (b) evaluate effectiveness of Southern California Edison's Tree Calculator and Tree Removal in mitigation of wildfires; and (c) produce a summary report with recommendations no later than March 31, 2020, or a later date mutually agreed to by the settling parties to produce the summary report at the earliest possible date.

51. Based on the Settlement Agreement, Southern California Edison will develop and apply output-based performance metrics as required by D.19-05-036 and will propose output-based performance metrics as part of its "Data Collection for Wildfire Mitigation Plans" Report of July 30, 2019.

52. The record in this proceeding, including the Settlement Agreement, provides sufficient information to enable the Commission to enforce its terms and discharge the Commission's future regulatory responsibilities with respect to the parties and interests in this proceeding.

53. Approving the Settlement Agreement grants the relief requested by the parties.

Conclusions of Law

1. Southern California Edison's Application for Grid Safety and Resiliency should be granted without modification as set forth in the Settlement Agreement between the parties (Appendix 1).

2. The Settlement Agreement between the parties complies with Rule 12.1(d) and is reasonable in light of the record, consistent with law and in the public interest and should be adopted. Nothing in the Settlement Agreement contravenes any statute or Commission decision or rule.

3. The Settlement Agreement is reasonable because it affords Southern California Edison the opportunity to record and recover the reasonable costs of the Grid Safety and Resiliency Program, which consists of enhancing and strengthening grid hardening, situational awareness, and operational practices.

4. The motions of the Office of the Safety Advocate, the Public Advocates Office of the Public Utilities Commission, The Utility Reform Network, the Small Business Utility Advocates, and Southern California Edison to offer in evidence their respective prepared testimony should be granted with the exception of proposed Exhibit SCE-04.

5. The agreed Grid Safety and Resiliency Program revenue requirements of \$407,291,000 (capital) and \$119,164,000 (O&M), based on 2018 dollars, is reasonable and supported by the record in this proceeding, and should be approved.

6. Southern California Edison should be required to file a Tier 2 advice letter within 60 days of this decision approving the Settlement Agreement to establish the Grid Safety and Resiliency Program Balancing Account and provide the updated annual Grid Safety and Resiliency Program revenue requirements based on \$407,291,000 (capital) and \$119,164,000 (O&M), with appropriate exclusions for wildfire capital expenditures after August 1, 2019, as required by Pub. Util. Code § 8386.3(e).

7. Based on the Settlement Agreement, the results of the Tree Removal Study may not be used to increase or disallow funds otherwise agreed to in the Settlement Agreement and authorized by this decision.

8. The Settlement Agreement is binding on all parties, resolves all issues in the proceeding, saves time and resources by avoiding lengthy and costly litigation, and protects public interests and safety by imposing new requirements

to enhance and strengthen grid hardening, situational awareness, and operational practices.

9. The benefits of the Settlement Agreement to the public outweigh the benefits and/or burden and uncertainties of continued litigation.

10. The Commission should rely upon the figures presented in Appendix 1 for all purposes consistent with established and historic general rate case processes practiced by the Commission and its Industry Divisions.

11. Within 60 days of the issuance of this decision, Southern California Edison should file a Tier 2 Advice Letter with revised tariff schedules that implement the Settlement Agreement. The advice letter should be effective for tariffs and services rendered as of September 10, 2018, as directed by D.19-01-019. Within seven days of the date of that advice letter is effective, Southern California Edison should notify its customers of any revised tariffs and rates.

12. All pending motions in this proceeding not specifically addressed in this decision, or not previously addressed, should be denied as moot.

O R D E R

IT IS ORDERED that:

1. The July 31, 2019, Joint Motion by Southern California Edison, the Public Advocates Office of the Public Utilities Commission, the Small Business Utility Advocates, and The Utility Reform Network for the Commission's Adoption of the Settlement Agreement in Application 18-09-002 is granted pursuant to Article 12.1 of the Commission's Rules of Practice and Procedure.

2. The Settlement Agreement between the parties (attached hereto as Appendix 1) is approved. Pursuant to the terms of the Settlement Agreement Southern California Edison's Application to implement changes in rates and tariffs is granted.

3. Southern California Edison is authorized \$11,328,000, in 2018 constant dollars, for operations and maintenance costs for Current Limiting Fuses in its Grid Safety and Resiliency Program Fusing Mitigation.

4. Southern California Edison is authorized \$45,326,500 in operations and maintenance for Tree Removal in its Grid Safety and Resiliency Program.

5. Southern California Edison will accelerate Tree Attachment removals as part of its Wildfire Covered Conductor Program to the extent possible given personnel requirements, resource availability, and consistency with its continual risk prioritization methodology improvements. Funding will come from the Wildfire Covered Conductor Program and rate recovery will be subject to the same terms as the rest of the Wildfire Covered Conductor Program.

6. Southern California Edison will develop a policy for taking privacy into account in implementing the high definition camera program to avoid privacy intrusion and will create a procedure for approving public requests from individuals to adjust or limit cameras' angles.

7. Southern California Edison will make data from weather stations installed under the Grid Safety and Resiliency Program available, at no cost, at a minimum, to nonprofit organizations, academic institutions, public agencies, and public safety entities.

8. Southern California Edison, in deciding whether certain circuits or portions of circuits should be considered for alternative mitigation, including undergrounding, will take various factors into consideration, including the pace at which alternative mitigation can be accomplished, the feasibility and cost of alternative mitigation in particular areas, the risk of ignition posed by overhead conductor in these areas, and the possible prevention of public safety power shutoff effects on customers and users, including small businesses.

9. Southern California Edison, in order to determine the public safety power shutoff effects that may potentially be avoided, will assess the potential source location, impact area, frequency and duration of public safety power shutoff events. Southern California Edison will use this analysis to assess the estimated number and class of customers, including small commercial customers, potentially affected by public safety power shutoffs in specific locations. Southern California Edison will also use this data as one factor in the overall consideration of the appropriateness of potential alternative mitigations, including undergrounding.

10. All revenue requirements associated with the Grid Safety and Resiliency Program capital and operations and maintenance expenditures shall be recorded in the Grid Safety and Resiliency Program Balancing Account.

11. Except for Wildfire Covered Conductor Program costs, all recorded Grid Safety and Resiliency Program capital and O&M recorded costs in excess of \$122,449,000 (capital) and \$113,625,000 (O&M) shall be subject to Reasonableness Review, unless otherwise provided for in this decision, including Appendix 1 (Settlement Agreement).

12. Southern California Edison's recovery of recorded amounts for Tree Removal shall be capped at a level no higher than 125 percent of Average Authorized Unit Cost for each tree removed.

13. Southern California Edison shall not have the opportunity to recover recorded amounts for Tree Removal in excess of 22,500 trees over the 2018-2020 period.

14. No reasonableness review is required for Wildfire Covered Conductor Program recorded costs up to 115 percent of forecast costs of \$284,842,000

(capital) and \$5,899,000 (O&M); recorded costs in excess of 115 percent of forecast costs shall be subject to reasonableness review.

15. If the average recorded unit cost for Covered Conductor (capital) exceeds its average forecast unit cost of \$428,000 per circuit mile, Southern California Edison's recovery of the amount by which the average recorded costs exceeds 115 percent of the average authorized unit costs shall be subject to reasonableness review.

16. If the average recorded unit cost for Tree Removal (O&M) exceeds its average forecast unit cost of \$2,018 per tree removed, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

17. If the average recorded unit cost for Current Limiting Fuses (capital) exceeds its average forecast unit cost of \$5,962 per current limiting fuse, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

18. If the average recorded unit cost for Current Limiting Fuses (O&M) exceeds its average forecast unit cost of \$4,441 per current limiting fuse, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

19. If the average recorded unit cost for high definition cameras (capital) exceeds its average forecast unit cost of \$25,850 per high definition camera, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

20. If the average recorded unit cost for weather stations (capital) exceeds its average forecast unit cost of \$16,920 per weather station, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

21. If the average recorded unit cost for remote-control automatic reclosers (capital) exceeds its average forecast unit cost of \$94,765 per remote-control automatic recloser, Southern California Edison's recovery of the amount by which the average recorded unit cost exceeds the average authorized unit cost shall be subject to reasonableness review.

22. Southern California Edison shall file a Tier 2 advice letter within 60 days of this decision approving the Settlement Agreement to establish the Grid Safety and Resiliency Program Balancing Account and provide the updated annual Grid Safety and Resiliency Program revenue requirements based on \$407,291,000 (capital) and \$119,164,000 (O&M), with appropriate exclusions for wildfire capital expenditures after August 1, 2019, as required by Pub. Util. Code § 8386.3(e). The Tier 2 advice letter shall specify that the Grid Safety and Resiliency Program Balancing Account will only record expenses through December 31, 2020.

23. Southern California Edison will include in its Tier 2 advice letter the specific amounts in the Grid Safety and Resiliency Program Memorandum Account that are transferred to the Grid Safety and Resiliency Balancing Account, and close the Grid Safety and Resiliency Program Memorandum Account.

24. Costs recorded in excess of the settlement amounts (and reasonableness threshold, where applicable) are subject to a reasonableness review, either in the next general rate case or through a separate application.

25. Southern California Edison will present a narrative explanation to the service list of A.18-09-002 addressing any variation between the Settled amounts listed in the attached Appendix 1, Table A-1, cells G-1-G-7, and for O&M Expenditures listed in the attached Appendix 1, Table A-2, cells G1-G-15, and the recorded spending before April 1, 2021.

26. Southern California Edison will present a narrative explanation to the service list of Application 18-09-002 addressing the variation between the average authorized unit costs and the average recorded unit costs for each Grid Safety and Resiliency Program component before April 1, 2021.

27. The reporting, consultation, and notice requirements set forth in Ordering Paragraphs 5 through 8 of Decision 19-01-091 shall continue through the end of 2020, with a final report due before June 1, 2021.

28. Southern California Edison will also include for each Grid Safety and Resiliency Program component information on the authorized unit cost and work units, and recorded unit costs and work units to-date in the monthly reports submitted pursuant to Decision 19-01-091.

29. Southern California Edison shall contract with a consulting firm or individual subject matter experts mutually chosen by settling parties, and shall include at least one arborist with significant experience conducting tree trimming and/or removal for utilities, and one distribution engineer with at least ten years' experience in fault protection to evaluate the need and effectiveness of its current Tree Calculator in implementing Tree Removal that effectively reduces wildfire risks, considering other mitigation measures implemented by Southern California Edison. This Tree Removal Study may be funded with up to \$750,000 collected from ratepayers.

30. Southern California Edison shall present to the service list of Application 18-09-002 the summary report with recommendations produced by the consulting firm or individual subject matter experts regarding the evaluation of the need and effectiveness of its current Tree Calculator in implementing Tree Removal that effectively reduces wildfire risks, considering other mitigation measures implemented by Southern California Edison no later than December 31, 2020.

31. The March 20, 2020, Motion of the Small Business Utility Advocates to accept the late filing of the March 16, 2020, motion is granted.

32. The motions of the Office of the Safety Advocate, the Public Advocates Office of the Public Utilities Commission, The Utility Reform Network, the Small Business Utility Advocates, and Southern California Edison to offer in evidence their respective prepared testimony are granted with the exception of proposed Exhibit SCE-04.

33. All pending motions in this proceeding not specifically addressed in this decision, or not previously addressed, are denied as moot.

34. Application 18-09-002 is closed.

This order is effective today.

Dated April 16, 2020, at San Francisco, California.

MARYBEL BATJER

President

LIANE M. RANDOLPH

MARTHA GUZMAN ACEVES

CLIFFORD RECHTSCHAFFEN

GENEVIEVE SHIROMA

Commissioners

APPENDIX 1